

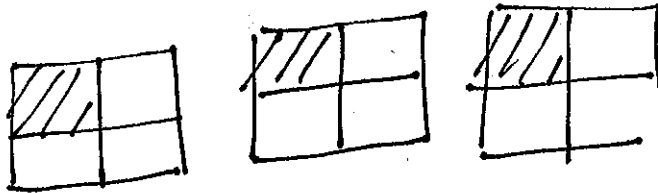
8-29-12

MULTIPLYING FRACTIONS

Models

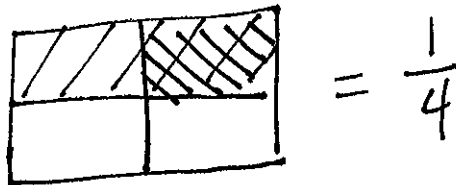
** Remember "OF" means to multiply

Ex: $3 \times \frac{1}{4}$ oo $3 \text{ OF } \frac{1}{4}$



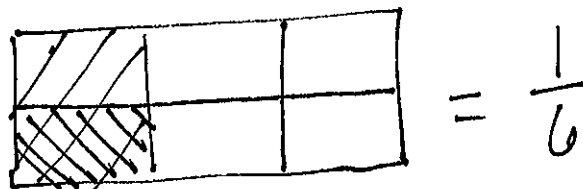
$$= \frac{3}{4}$$

Ex: $\frac{1}{2} \times \frac{1}{2}$ oo $\frac{1}{2} \text{ OF } \frac{1}{2}$



$$= \frac{1}{4}$$

Ex: $\frac{1}{2} \times \frac{1}{3}$ oo $\frac{1}{2} \text{ OF } \frac{1}{3}$



$$= \frac{1}{6}$$

STEPS:

① Make sure both factors are FRACTIONS
(Whole # \rightarrow put 1 as denominator)
Mixed # \rightarrow change to improper fraction)

② "Simplify b/4 you multiply"
 \rightarrow Cross out (simplify) any top w/ any bottom

③ Multiply numerators
Multiply denominators

④ Simplify if needed

Change improper fractions to mixed #s

$$\text{Ex: } \frac{3}{4} \times 6 = \frac{3}{\cancel{4}_2} \times \frac{\cancel{6}^3}{1} = \frac{9}{2} = 4\frac{1}{2}$$

$$\text{Ex: } 10 \times \frac{5}{6} = \frac{\cancel{10}^5}{1} \times \frac{5}{\cancel{6}_3} = \frac{25}{3} = 8\frac{1}{3}$$

$$\text{Ex: } \frac{\cancel{3}^1}{\cancel{4}_2} \times \frac{\cancel{2}^1}{\cancel{3}_1} = \frac{1}{2}$$

$$\text{Ex: } \frac{9}{10} \times 4\frac{3}{8} = \frac{9}{\cancel{10}_2} \times \frac{\cancel{35}^7}{8} = \frac{63}{16} = 3\frac{15}{16}$$

$$\text{Ex: } 3\frac{3}{4} \times 1\frac{1}{5} =$$